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| 09/852,200 | 05/08/2001 | Robert Beckwith | B1-4171 | 4197 |

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EXAMINER

MEUCCI, MICHAEL D

ART UNIT

PAPER NUMBER

2142

DATE MAILED: 03/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 09/852,200 | Applicant(s) BECKWITH ET AL. | |
| | Examiner Michael D. Meucci | Art Unit 2142 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7,8,10-17,20,22,23,27,30-33,36,38 and 41-46 is/are pending in the application.
- 4a) Of the above claim(s) 30-33,36,38 and 42-46 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7,8,10-17,20,22,23,27 and 41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to the request for reconsideration filed 19 December 2005.

2. Examiner acknowledges cancellation of claims 1-6, 9, 18-19, 21, 24-26, 28-29, 34-35, 37, and 39-40.

Election/Restrictions

3. Newly submitted claim 42 and previously presented dependent claims 30-33, 36, 38, and 43-46 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

Group I: Claims 7-8, 10-17, 20, 22-23, 27, and 41 drawn to a synchronizing a messaging system through a control process, classified in class 709, subclass 203 (client/server).

Group II: Claims 30-33, 36, 38, and 42-46 drawn to a simulation environment, classified in class 703, subclass 22 (software program – i.e., performance prediction).

4. The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as a subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention I has separate utility such as a control process for receiving the messages sent from the server process and the

client process and for sending the messages sent from the server and client processes, whereas invention II has separate utility such as starting the server processes included in the simulated process with the control program. See MPEP § 806.05(d).

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 30-33, 36, 38, and 42-46 have been withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Oath/Declaration

5. The declaration of citizenship filed on 19 September 2005 is sufficient to overcome the objection to the oath/declaration.

Drawings

6. The corrected drawing sheet for Fig. 1 was received on 19 September 2005. This drawing is acceptable.

Response to Amendment

7. The objection to the specification pertaining to subject matter disclosed in claim 18 is now considered moot in view of the cancellation of the claim.

8. The claim objection pertaining to claim 21 is now considered moot in view of the cancellation of the claim.

9. The 35 U.S.C. 112 first paragraph rejection to claim 18 is now considered moot in view of the cancellation of the claim.

10. The 35 U.S.C. 112 second paragraph rejection to claim 1 is now considered moot in view of the cancellation of the claim.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 41, 7, 11, 17, and 23, rejected under 35 U.S.C. 103(a) as being unpatentable over Kuo et al. (U.S. 6,330,582 B1) hereinafter referred to as Kuo in view of Redmond (WIPO Publication WO99/22317).

a. As per claim 41, Kuo teaches: at least one server process capable of sending and receiving messages (abstract and lines 13-17 of column 3); at least one client process capable of sending and receiving messages (abstract and lines 13-17 of column 3); only one control process for passing the messages to and from the server process and the client process (abstract, lines 20-35 of column 2, and lines 49-52 of column 3); and the control process sets synchronization points in the server process, the synchronization points indicating points in time where the server process pauses until restarted by the control process (lines 53-58 of column 4).

Kuo does not explicitly teach: where the server process, the client process, and the control process are all separate and distinct processes, and all messages between the server process and the client process are controlled by and relayed through the control process. However, Redmond discloses: "Central controller 18 receives message data 12, via a communications interface, and automatically communicates with and controls database 22 to remove and/or disperse information from database 22 that matches information contained in the message data 12," (lines 21-25 of page 10).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have the server, client, and control processes as separate and distinct processes and have all messages between the server process and the client process controlled by and relayed through the control process. "Preferably, system 10 provides an automated central controller 18 to automatically communicate with and control a plurality of databases 22, 24, 26 upon being supplied with message data 12 from a user," (lines 25-27 of page 10 in Redmond). It is for this reason that one of ordinary skill in the art at the time of the applicant's invention would have been motivated to have the server, client, and control processes as separate and distinct processes and have all messages between the server process and the client process controlled by and relayed through the control process in the system as taught by Kuo.

b. As per claim 7, Kuo teaches: said control process sets up a server order queue... (lines 33-35 of column 2 and lines 35-42 of column 3).

c. As per claim 11, Kuo teaches: said control process sets up a server order queue... (lines 33-35 of column 2 and lines 35-42 of column 3).

d. As per claim 17, Kuo teaches: said control process software module sets up a plurality of predetermined ordered queues... (lines 33-35 of column 2 and lines 35-42 of column 3).

e. As per claim 23, Kuo teaches: the control process stops the server process when the server process reaches a synchronization point (lines 53-58 of column 4)

13. Claims 8, 16, and 27 rejected under 35 U.S.C. 103(a) as being unpatentable over Kuo and Redmond as applied to claim 41, in view of Baker et al. (U.S. 6,611,498 B1) hereinafter referred to as Baker.

a. As per claim 8, Kuo teaches: said server process evaluates... (lines 24-42 of column 3); and at least one said server process... (lines 24-42 of column 3).

Kuo does not explicitly teach: said event expression message containing a time stamp... However, Baker discloses: "A client session's time stamp is updated each time a message transaction containing the session id for the session is received," (lines 13-15 of column 17).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have the event expression message contain a time stamp. "If the time stamp value shows that a session has aged, the session entry for the aged session is cleared from the session table 660," (lines 23-35 of column 17 in Baker). It is for this reason that one of ordinary skill in the art at the time of the applicant's invention

would have been motivated to have the event expression message contain a time stamp in the system as taught by Kuo.

b. As per claim 16, Kuo teaches: a plurality of client processes... (abstract); a plurality of client processes, each of said server processes evaluates... (lines 24-42 of column 3).

Kuo does not explicitly teach: said event expression message containing a time stamp... However, Baker discloses: "A client session's time stamp is updated each time a message transaction containing the session id for the session is received," (lines 13-15 of column 17).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have the event expression message contain a time stamp. "If the time stamp value shows that a session has aged, the session entry for the aged session is cleared from the session table 660," (lines 23-35 of column 17 in Baker). It is for this reason that one of ordinary skill in the art at the time of the applicant's invention would have been motivated to have the event expression message contain a time stamp in the system as taught by Kuo.

c. As per claim 27, Kuo teaches: a plurality of server processes (abstract and lines 13-17 of column 3); a plurality of client processes associated with the server processes (abstract and lines 13-17 of column 3); the server processes communicating via the control process with the client processes (abstract, lines 20-35 of column 2, and lines 49-52 of column 3); each of the server processes evaluates an even expression to determine the occurrence of an event in the server process (lines 24-42 of column 3).

Kuo does not explicitly teach: the server processes sends an event expression message to the control process upon the occurrence of the even in the server process, the event expression message contains a time stamp indicating a time at which the even occurred in the server process. However, Baker discloses: "A client session's time stamp is updated each time a message transaction containing the session id for the session is received," (lines 13-15 of column 17).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have the event expression message contain a time stamp. "If the time stamp value shows that a session has aged, the session entry for the aged session is cleared from the session table 660," (lines 23-35 of column 17 in Baker). It is for this reason that one of ordinary skill in the art at the time of the applicant's invention would have been motivated to have the event expression message contain a time stamp in the system as taught by Kuo.

14. Claim 10 rejected under 35 U.S.C. 103(a) as being unpatentable over Kuo and Redmond as applied to claim 41, in view of Trinh et al. (U.S. 6,654,956 B1) hereinafter referred to as Trinh.

a. As per claim 10, Kuo does not explicitly teach: the time stamp is an indication of the elapsed time from a start of the control process, and where the elapsed time is proportional to a time elapsed in the control process between the synchronization points. However, Trinh discloses: "An embodiment of the invention compares the presentation time at the receiver with the server elapsed time estimated

from timestamp values on the served data. When the presentation time and the server elapsed time differ by an unacceptably large amount, an adjustment is made to the audio data stream to re-synchronize the presentation time with the elapsed time, which effectively also synchronizes the overall presentation rate with the overall server rate," (line 67 of column 2 through line 8 of column 3).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have the time stamp as an indication of the elapsed time from a start of the control process, and where the elapsed time is proportional to a time elapsed in the control process between the synchronization points. "It would be advantageous to synchronize presentation of video data at a receiver with the rate the data is served by a video server without the need for a voltage control oscillator. This is achieved through real-time adjustments to the audio stream and subsequent synchronization of the video stream with the adjusted audio stream," (lines 56-61 of column 2 in Trinh). It is for this reason that one of ordinary skill in the art at the time of the applicant's invention would have been motivated to have the time stamp as an indication of the elapsed time from a start of the control process, and where the elapsed time is proportional to a time elapsed in the control process between the synchronization points in the system as taught by Kuo.

15. Claims 12-13 rejected under 35 U.S.C. 103(a) as being unpatentable over Kuo in view of Redmond as applied to claim 11, further in view of Willmann et al. (U.S. 5,521,923) hereinafter referred to as Willmann.

a. As per claims 12 and 13, Kuo teaches: said control process receives a plurality of said event expression messages... (lines 33-35 of column 2 and lines 35-42 of column 3).

Kuo does not explicitly teach: said control process ordering each of said event expression messages... and said control process delivers said sorted event expression messages... However, Willmann discloses: "Each of these data packets is provided with a time stamp TS, which gives information on the order of arrival of the data packets. The queues QU1 and QU2 are organized as FIFO queues (FIFO=first-in-first-out)," (lines 16-19 of column 4).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have said control process ordering each of said event expression messages... and said control process delivers said sorted event expression messages... FIFO queue usage with timestamps is very well known in the art at the time of the applicant's invention. It is for this reason that one of ordinary skill in the art at the time of the applicant's invention would have been motivated to have the control process ordering each of said even expression messages within said server order queue according to the earliest time of said time stamp at which said even occurred in said sever process and to have said control process delivers said sorted event expression messages to said client processes associated with said server processes according to said predetermined ordered queue of client processes in the system as taught by Kuo and Baker.

16. Claims 14-15 rejected under 35 U.S.C. 103(a) as being unpatentable over Kuo and Redmond as applied to claim 41, in view of Wegrzyn (U.S. 5,729,540).

a. As per claims 14-15, Kuo does not explicitly teach: each client process sends a finish message; control process holds said finish messages; and control process sends a finish message... However, Wegrzyn discloses: "messages are scheduled using a temporary data structure--namely the combined messages/scheduling data block 68. The combined messages/scheduling data block 68 temporarily holds messages until the end of each scheduler processing cycle," (line 66 of column 14 through line 3 of column 15).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have each client process sends a finish message; control process holds said finish messages; and control process sends a finish message... "The combined messages/scheduling data block 68 temporarily holds messages until the end of each scheduler processing cycle when the messages are ready to be formatted by frame formatter 70," (lines 1-5 of column 15 in Wegrzyn). It is for this reason that one of ordinary skill in the art at the time of the applicant's invention would have been motivated to have each client process sends a finish message; control process holds said finish messages; and control process sends a finish message in the system as taught by Kuo.

17. Claim 20 rejected under 35 U.S.C. 103(a) as being unpatentable over Kuo and Redmond as applied to claim 41, in view of Schwaller et al. (U.S. 6,408,335 B1) hereinafter referred to as Schwaller.

a. As per claim 20, Kuo does not explicitly teach: the simulation environment simulates a device selected from a group consisting of electrical devices... However, Schwaller discloses: "Simulation tools provide a mathematical model of a network. The model is generated based on information about network design, hardware, and traffic patterns," (lines 43-45 of column 2). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to simulate a device selected from a group consisting of electrical devices... "Once the model is created, it can be used to predict network performance under different scenarios," (lines 45-47 of column 2 in Schwaller). It is for this reason that one of ordinary skill in the art at the time of the applicant's invention would have been motivated to simulate a device selected from a group consisting of electrical devices... in the system as taught by Kuo and Redmond.

18. Claim 22 rejected under 35 U.S.C. 103(a) as being unpatentable over Kuo and Redmond as applied to claim 41, in view of Gee (U.S. 6,178,395 B1).

a. Kuo does not explicitly teach: control process software module comprises a synchronization varying software module for varying the elapsed time duration between said synchronization points. However, Gee discloses: "Either the start time of the response or the duration of the response may then iteratively be modified to cause

the response to eventually overlap the hit window, thereby generating a correct response cue," (abstract).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have the control process software module comprise a synchronization varying software module for varying the elapsed time duration between said synchronization points. "Before calibration process 300 begins, the diagnostic/training software (such as OMDFF) may be initialized along with the data acquisition processor 106 of FIG. 2 to synchronize the progression of presenting the stimulus by the software and the mouse down signal durations generated by data acquisition computer/processor 104," (lines 55-61 of column 7 in Gee). It is for this reason that one of ordinary skill at the time of the applicant's invention would have been motivated to have the control process software module comprise a synchronization varying software module for varying the elapsed time duration between said synchronization points in the system as taught by Kuo and Redmond

Response to Arguments

19. Applicant's arguments filed 19 December 2005 have been fully considered but they are not persuasive.

20. In response to applicant's argument that the examiner has combined an excessive number of references, reliance on a large number of references in a rejection does not, without more, weigh against the obviousness of the claimed invention. See *In re Gorman*, 933 F.2d 982, 18 USPQ2d 1885 (Fed. Cir. 1991).

21. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

22. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Maurer (U.S. 6,922,663 B1) discloses workstation simulation-client virtualization.

Tenney et al. (U.S. 6,944,584 B1) discloses client/server simulation system.

Harless et al. (U.S. 6,944,586 B1) discloses simulated dialogue system in a network environment.

Lakhdar (U.S. 6,968,356 B1) discloses browser simulation across a network including firewall.

Tobler (U.S. 6,978,232 B1) discloses message simulation with a virtual server.

Fischer et al. (U.S. 7,000,031 B2) discloses synchronous transport of packets between nodes in a frame-based communications network.

Maurer (U.S. 7,006,963 B1) discloses intelligent workstation simulation.

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Meucci at (571) 272-3892. The examiner can normally be reached on Monday-Friday from 9:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell, can be reached at (571) 272-3868. The fax phone number for this Group is 571-273-8300.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [michael.meucci@uspto.gov].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record

includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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